



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 2389 Carney Creek

Submitted by
SES, Inc.

To
Missouri Department of Natural Resources
Water Protection Program

Date Received: June 4, 2007

Field Data Sheets for Recreation Use Stream Surveys
Data Sheet A - Water Body Identification
(For water body being surveyed)

Water Body Information

Water Body Name:	Carney Creek	WBID:	2389
8 digit HUC code:	11010002	County:	Barry
Upstream Legal Description	24N 25W 3		
Downstream Legal Description	24N 25W 26		
Number of Sites Evaluated	3		
List all site numbers, listed upstream to downstream	3,2,1		

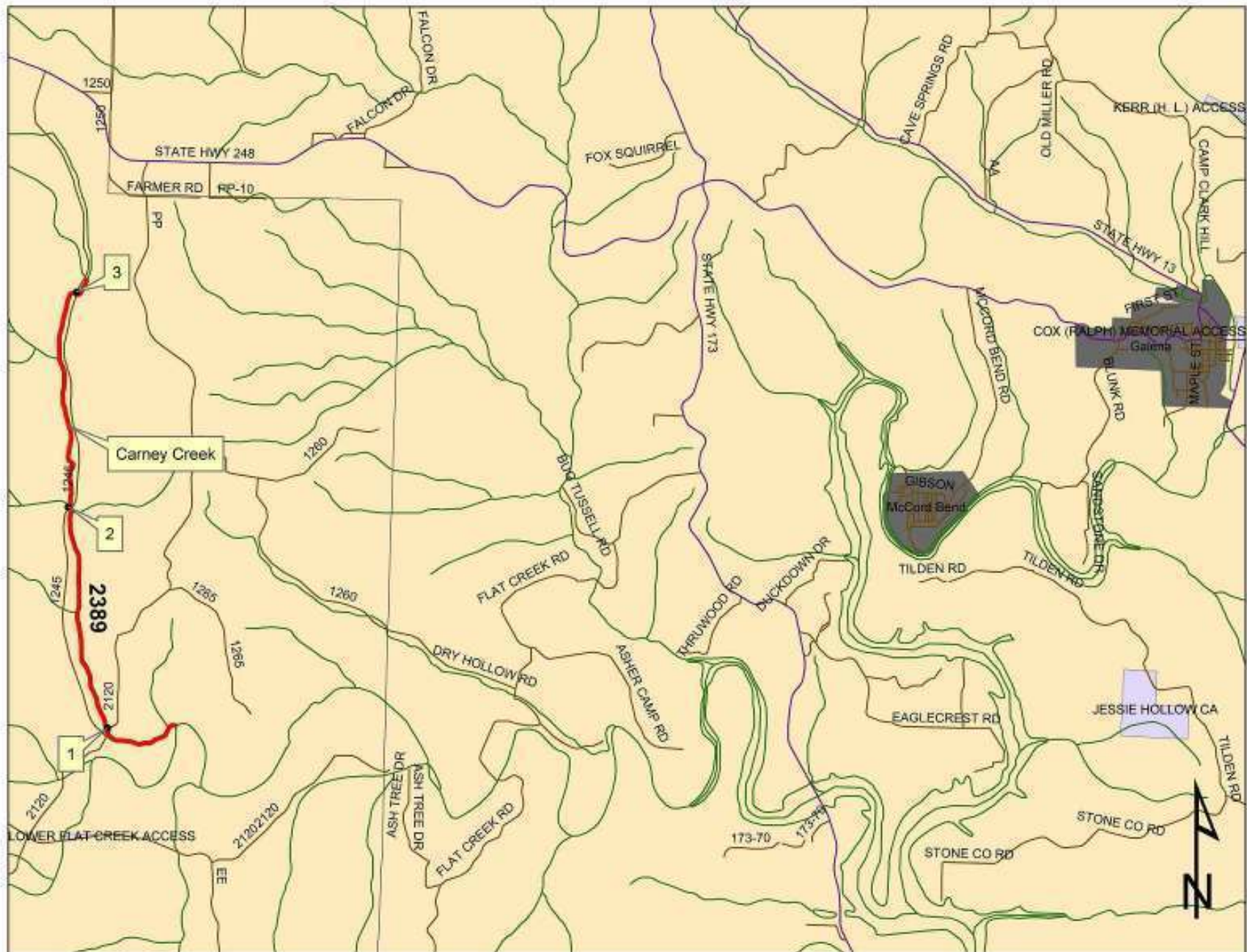
Discharger Facility Information

Discharger Facility Name(s):	Non-point source
Discharger Permit Number(s):	-----

UAA Surveyor

Name of Surveyor:	Nolan Pringle	Telephone Number:	(913)307-0046
Organization/Employer:	SES, Inc.		
Position:	Field Team Leader		

Signed: _____ Date: _____



Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 2389
 Site # 1

Date and Time: 5/20/2007 14:15

Current Weather Conditions sunny, clear

Weather Conditions for Past 10 days: Rained about 0.65 inches on 5/15

Drought Conditions? No

Site Location (e.g. road crossing) At road crossing 2120

GPS Mark: 44

Upstream Photo 87 Downstream Photo 86

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	None of the Above	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	None of the Above

WBID # 2389 **Site #** 1
Mark # 44 **Dissolved Oxygen (ppm)** 8.4
Upstream Views Physical Dimensions: Is there any water present at this view? yes

If so, is there an obvious current? yes

Select one of the following channel features:

	% of Channel Feature				
Riffle	19				
Run	45				
Pool	36				

Downstream View's Physical Dimensions: Is there any water present at this view?

If so, is there an obvious current?

Substrate:

% Cobble	% Gravel	% Sand	% Silt
50	50	0	0
% Mud/Clay	% Bedrock		
0	0		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

No floating algae. Vegetation on banks, but not in water. Algae on rocks.

Water Characteristics

Odor	Sewage	Musky	Chemical	None	Other
Color	Clear	Green	Gray	Milky	Other
Bottom Deposit	Sludge	Solids	Fine Sed.	None	Other
Surface Deposit	Oil	Scum	Foam	None	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 1

Mark # 44

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.15	Transect 5	0.15	Transect 9	0.10
Substrate:	0.25	Substrate:	0.30	Substrate:	0.20
gravel/cobble	0.25	cobble/gravel	0.30	cobble/gravel	0.20
Water Clarity:	0.20	Water Clarity:	0.55	Water Clarity:	0.20
clear	0.20	clear	0.65	clear	0.20
Channel Feature:	0.20	Channel Feature:	0.70	Channel Feature:	0.15
pool	0.20	pool	0.70	pool	0.05
Channel Width:	0.25	Channel Width:	0.65	Channel Width:	0.05
8 yards	0.20	4 yards	0.60	7 yards	0.05
0.20	0.20	0.58	0.30	0.13	0.05
Transect 2	0.05	Transect 6	0.05	Transect 10	0.05
Substrate:	0.05	Substrate:	0.10	Substrate:	0.05
cobble/gravel	0.05	cobble/gravel	0.15	cobble/gravel	0.15
Water Clarity:	0.05	Water Clarity:	0.15	Water Clarity:	0.20
clear	0.15	clear	0.20	clear	0.20
Channel Feature:	0.15	Channel Feature:	0.45	Channel Feature:	0.20
run	0.25	run	0.50	run	0.15
Channel Width:	0.30	Channel Width:	0.65	Channel Width:	0.05
8 yards	0.25	6 yards	0.70	6 yards	0.05
0.15	0.20	0.23	0.25	0.10	0.05
Transect 3	0.15	Transect 7	0.05	Transect 11	0.15
Substrate:	0.15	Substrate:	0.15	Substrate:	0.05
cobble/gravel	0.10	cobble/gravel	0.30	gravel/cobble	0.05
Water Clarity:	0.20	Water Clarity:	0.35	Water Clarity:	0.05
clear	0.15	clear	0.45	clear	0.20
Channel Feature:	0.10	Channel Feature:	0.45	Channel Feature:	0.15
riffle	0.05	run	0.40	riffle	0.20
Channel Width:	0.05	Channel Width:	0.35	Channel Width:	0.10
3 yards	0.05	6 yards	0.30	6 yards	0.05
0.10	0.05	0.33	0.15	0.08	0.05
Transect 4	0.10	Transect 8	0.05		
Substrate:	0.10	Substrate:	0.15	Site Median	Site Maximum
cobble/gravel	0.15	cobble/gravel	0.05	0.20	0.70
Water Clarity:	0.35	Water Clarity:	0.20		
clear	0.40	clear	0.40		
Channel Feature:	0.40	Channel Feature:	0.40		
run	0.35	pool	0.35		
Channel Width:	0.25	Channel Width:	0.25		
4 yards	0.10	7 yards	0.20		
0.20	0.05	0.20	0.15		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 2389
 Site # 2

Date and Time: 5/20/2007 14:55

Current Weather Conditions sunny, clear

Weather Conditions for Past 10 days: Rained about 0.65 inches on 5/15

Drought Conditions? No

Site Location (e.g. road crossing) At road crossing 1245

GPS Mark: 45

Upstream Photo 88 Downstream Photo 89

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	None of the Above	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	None of the Above

WBID # 2389 **Site #** 2
Mark # 45 **Dissolved Oxygen (ppm)** 9.4
Upstream Views Physical Dimensions: Is there any water present at this view? yes

If so, is there an obvious current? yes

Select one of the following channel features:

	% of Channel Feature				
Riffle	30				
Run	48				
Pool	22				

Downstream View's Physical Dimensions: Is there any water present at this view?

If so, is there an obvious current?

Substrate:

% Cobble	% Gravel	% Sand	% Silt
40	60	0	0
% Mud/Clay	% Bedrock		
0	0		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

No floating algae. Vegetation along banks. Algae on rocks (little).

Water Characteristics

Odor	Sewage	Musky	Chemical	None	Other
Color	Clear	Green	Gray	Milky	Other
Bottom Deposit	Sludge	Solids	Fine Sed.	None	Other
Surface Deposit	Oil	Scum	Foam	None	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 2

Mark # 45

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.05	Transect 5	0.05	Transect 9	0.05
Substrate:	0.00	Substrate:	0.10	Substrate:	0.15
gravel/cobble	0.00	gravel/cobble	0.20	gravel/cobble	0.10
Water Clarity:	0.05	Water Clarity:	0.30	Water Clarity:	0.15
clear	0.05	clear	0.25	clear	0.15
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.15
rifle/run	0.00	rifle/run	0.00	run	0.15
Channel Width:	0.15	Channel Width:	0.00	Channel Width:	0.05
18 yards	0.20	9 yards	0.05	5 yards	0.05
0.05	0.10	0.08	0.10	0.13	0.05
Transect 2	0.10	Transect 6	0.15	Transect 10	0.05
Substrate:	0.15	Substrate:	0.10	Substrate:	0.15
gravel/cobble	0.20	gravel/cobble	0.10	gravel/cobble	0.25
Water Clarity:	0.35	Water Clarity:	0.25	Water Clarity:	0.25
clear	0.30	clear	0.25	clear	0.25
Channel Feature:	0.25	Channel Feature:	0.30	Channel Feature:	0.25
run	0.15	pool	0.20	run	0.15
Channel Width:	0.05	Channel Width:	0.10	Channel Width:	0.10
4 yards	0.05	7 yards	0.05	5 yards	0.10
0.15	0.05	0.13	0.05	0.15	0.05
Transect 3	0.05	Transect 7	0.05	Transect 11	0.10
Substrate:	0.15	Substrate:	0.05	Substrate:	0.10
gravel/cobble	0.25	gravel	0.10	gravel/cobble	0.20
Water Clarity:	0.35	Water Clarity:	0.15	Water Clarity:	0.15
clear	0.25	clear	0.10	clear	0.15
Channel Feature:	0.15	Channel Feature:	0.05	Channel Feature:	0.05
pool	0.10	rifle	0.10	rifle/run	0.05
Channel Width:	0.05	Channel Width:	0.10	Channel Width:	0.00
5 yards	0.05	10 yards	0.05	7 yards	0.05
0.13	0.05	0.08	0.05	0.08	0.05
Transect 4	0.15	Transect 8	0.10	Site Median	Site Maximum
Substrate:	0.25	Substrate:	0.20	0.10	0.35
gravel/cobble	0.30	gravel	0.35		
Water Clarity:	0.15	Water Clarity:	0.25		
clear	0.05	clear	0.20		
Channel Feature:	0.05	Channel Feature:	0.30		
rifle/run	0.05	run	0.20		
Channel Width:	0.05	Channel Width:	0.15		
11 yards	0.05	3 yards	0.05		
0.10	0.15	0.20	0.05		

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

WBID 2389
 Site # 3

Date and Time: 5/20/2007 15:30

Current Weather Conditions sunny, clear

Weather Conditions for Past 10 days: Rained about 0.65 inches on 5/15

Drought Conditions? No

Site Location (e.g. road crossing) At road crossing 1245 (north/upstream of previous)

GPS Mark: 46

Upstream Photo 90 Downstream Photo 91

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	None of the Above	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	RV/ATV Tracks	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	None of the Above

WBID # 2389 **Site #** 3
Mark # 46 **Dissolved Oxygen (ppm)** 10.3
Upstream Views Physical Dimensions: Is there any water present at this view? yes
 If so, is there an obvious current? yes

Select one of the following channel features:

	% of Channel Feature				
Riffle	9				
Run	46				
Pool	45				

Downstream View's Physical Dimensions: Is there any water present at this view?

If so, is there an obvious current?

Substrate:

% Cobble	% Gravel	% Sand	% Silt
50	50	0	0
% Mud/Clay	% Bedrock		
0	0		

Aquatic Vegetation: (Note amount of vegetation or algal growth at the assessment site)

Vegetation along bank. Little algae on rocks. No floating algae. Some filamentous algae in shallow riffles. Wild mint fills the air and grows along bank.

Water Characteristics

Odor	Sewage	Musky	Chemical	None	Other
Color	Clear	Green	Gray	Milky	Other
Bottom Deposit	Sludge	Solids	Fine Sed.	None	Other
Surface Deposit	Oil	Scum	Foam	None	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 3

Mark # 46

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.15	Transect 5	0.05	Transect 9	0.05
Substrate:	0.15	Substrate:	0.05	Substrate:	0.05
cobble/gravel	0.35	gravel/cobble	0.15	gravel/cobble	0.10
Water Clarity:	0.70	Water Clarity:	0.25	Water Clarity:	0.20
clear	0.60	clear	0.25	clear	0.25
Channel Feature:	0.45	Channel Feature:	0.25	Channel Feature:	0.30
pool	0.50	pool	0.25	run	0.30
Channel Width:	0.55	Channel Width:	0.20	Channel Width:	0.20
9 yards	0.40	5 yards	0.20	3 yards	0.10
0.43	0.35	0.20	0.15	0.15	0.05
Transect 2	0.10	Transect 6	0.05	Transect 10	0.05
Substrate:	0.15	Substrate:	0.15	Substrate:	0.10
gravel/cobble	0.25	gravel/cobble	0.10	cobble/gravel	0.05
Water Clarity:	0.20	Water Clarity:	0.20	Water Clarity:	0.10
clear	0.25	clear	0.20	clear	0.10
Channel Feature:	0.20	Channel Feature:	0.25	Channel Feature:	0.20
run	0.20	run	0.70	run	0.25
Channel Width:	0.10	Channel Width:	0.20	Channel Width:	0.30
4 yards	0.05	2 yards	0.10	4 yards	0.25
0.18	0.05	0.18	0.05	0.15	0.25
Transect 3	0.15	Transect 7	0.10	Transect 11	0.10
Substrate:	0.15	Substrate:	0.15	Substrate:	0.15
gravel/cobble	0.15	gravel/cobble	0.15	gravel/cobble	0.20
Water Clarity:	0.25	Water Clarity:	0.15	Water Clarity:	0.15
clear	0.20	clear	0.20	clear	0.15
Channel Feature:	0.25	Channel Feature:	0.25	Channel Feature:	0.15
pool	0.15	pool	0.20	riffle	0.10
Channel Width:	0.10	Channel Width:	0.25	Channel Width:	0.05
3 yards	0.05	4 yards	0.20	3 yards	0.05
0.15	0.05	0.18	0.15	0.13	0.05
Transect 4	0.15	Transect 8	0.05	Site Median	Site Maximum
Substrate:	0.25	Substrate:	0.15	0.20	0.70
gravel/cobble	0.45	gravel/cobble	0.20		
Water Clarity:	0.60	Water Clarity:	0.25		
clear	0.60	clear	0.25		
Channel Feature:	0.65	Channel Feature:	0.20		
run	0.60	pool	0.20		
Channel Width:	0.50	Channel Width:	0.25		
3 yards	0.30	4 yards	0.20		
0.48	0.10	0.20	0.10		

WBID# 2389



Site# 1 Photo ID# 87, Upstream



Site# 1 Photo ID# 86, Downstream



Site# 2 Photo ID# 88, Upstream



Site# 2 Photo ID# 89, Downstream

WBID# 2389



Site# 3 Photo ID# 90, Upstream



Site# 3 Photo ID# 91, Downstream